

GOVERNOR FRANK KEATING'S
TAR CREEK SUPERFUND TASK FORCE

ALTERNATIVES FOR ASSESSING INJURIES
TO NATURAL RESOURCES AT THE TAR CREEK SUPERFUND SITE

OTTAWA COUNTY, OKLAHOMA

REPORT OF THE
NATURAL RESOURCE DAMAGES SUBCOMMITTEE

JULY 21, 2000

INTRODUCTION

On February 2, 2000, Brian C. Griffin, Oklahoma Secretary of Environment, established a Subcommittee of the Governor's Tar Creek Superfund Task Force to research avenues for assessing Natural Resource Damage Claims at the Tar Creek Superfund Site (the "Site"). The Subcommittee includes representatives of the City of Miami; Grand Gateway; the Oklahoma Attorney General's Office; the Oklahoma Department of Wildlife Conservation; the Quapaw Tribe of Oklahoma; the United States Fish and Wildlife Service, and the United States Bureau of Indian Affairs. The Subcommittee was chaired by Kelly Hunter Burch, Assistant Attorney General, and Lloyd Landreth, Esq., Gardere & Wynne, LLP.

The Subcommittee's objective is to explore state and tribal alternatives for recovering damages for injuries to natural resources resulting from mining activities at the Site. Specifically, the Subcommittee was tasked with:

- (1) Developing an outline of actions needed to assess injuries and damages which identifies cooperating agencies, timeframes for completion, and resource needs; and
- (2) Outlining a process for identifying all potentially responsible parties that may be liable for Natural Resource Damages and the resources needed to complete that process.

LEGAL BASIS FOR NATURAL RESOURCE DAMAGE CLAIMS

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) provides that responsible parties may be held liable for damages for *injury, destruction, or loss of natural resources resulting from a release of hazardous substances, including the reasonable costs of assessing the damages*. 42 U.S.C § 9607(a)(C). Natural resources under CERCLA include "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to or otherwise controlled by the United States . . . any State or local government . . . or any Indian tribe" 42 U.S.C. §9601(16).

Natural resource damage claims are different from remediation efforts undertaken by the Environmental Protection Agency under CERCLA, which are intended to abate threats to public health and the environment. Claims for natural resource damages pursuant to CERCLA are designed to compensate the public for past and interim injuries to natural resources. Only designated federal, state or tribal trustees may bring natural resource damage claims on behalf of the public. Damages recovered by the natural resource trustees must be used to “restore, replace or acquire the equivalent of such natural resources.” 42 U.S.C. §9607(f)(1).

THE NATURAL RESOURCE DAMAGE ASSESSMENT PROCESS

There are two types of regulations available for assessment of natural resource damages: (1) standard simplified procedures requiring minimal field investigation (Type A); and (2) protocols for conducting assessments in individual cases (Type B). These regulations were promulgated by the U.S. Department of Interior in 43 C.F.R. Part 11. A natural resource damage assessment (NRDA) conducted by trustees in accordance with these regulations has the force and effect of a rebuttable presumption in any administrative or judicial proceeding under CERCLA. 42 U.S.C. §9607(f)(2)(C). However, CERCLA also allows the trustees to use other methods of assessing and quantifying damages.

If the trustees for the Tar Creek Superfund Site elect to follow the U.S. Department of Interior regulations, only the Type B method would be applicable to the NRDA. A Type B Assessment requires a multi-stage administrative process, with opportunities for public and Potentially Responsible Party (“PRP”) participation in the latter stages. The stages of a Type B Assessment are summarized as follows:

- (1) Preassessment Phase. This phase provides for notification, coordination, and emergency action. It includes a preassessment screen which is intended to be a rapid review of readily available information. The preassessment screen allows the trustees to make an initial determination of whether a hazardous substance release has affected natural resources and whether the potential injury is significant enough to justify a NRDA.
- (2) Assessment Plan Phase. If the trustees decide to proceed with a NRDA, a trustee council may

be formed in which one representative is designated as the “lead trustee.” The trustee council will then develop an Assessment Plan which outlines the methodologies and processes to apply in the NRDA. The Assessment Plan ensures that the assessment is performed in a planned and systematic manner and that the methodologies chosen demonstrate a reasonable cost. PRPs may be invited to participate in the assessment process at this stage.

- (3) Type B Assessments. The process for implementing Type B assessments has been divided into the following three phases:
- (1) Injury Determination phase. In this phase, the trustees formally establish that one or more natural resources have been injured as a result of a release of a hazardous substance. The trustees will determine both the pathways through which resources have been exposed to a hazardous substance and the nature of the injury.
 - (2) Quantification Phase. The purpose of this phase is to establish the baseline condition of the injured resource, the areal and temporal extent of the injury, and estimates of the likelihood and time for recovery.
 - (3) Damage Determination Phase. The purpose of this phase is to establish the appropriate compensation expressed as a monetary value for the injuries to natural resources. The regulations include guidance on acceptable cost estimation and valuation methodologies for determining compensation based on the cost of restoration, rehabilitation, replacement, and/or acquisition of equivalent resources, and the lost value of the injured resources from the time of injury until the resources recover or are restored.
- (4) Post-assessment Phase. This phase requires a Report of Assessment containing the results of the assessment and it documents that the assessment has been carried out according to regulations. It also delineates the manner in which the demand will be presented to PRPs and the steps to be taken when sums are awarded as damages.

PRELIMINARY INFORMATION ON NRD AT THE TAR CREEK SITE

The Tar Creek Superfund Site, in Ottawa County, Oklahoma, is related to a larger Superfund remedial action being conducted in Cherokee County, Kansas and Jasper County, Missouri. The remedial actions are not being conducted jointly, however, releases of hazardous substances in these three states are the result of lead and zinc mining that took place from the early 1900's to the mid 1970's in what is commonly referred to as the Tri-State Mining District.

When mining operations ceased at the Site in the 1970s, the metallic sulfide minerals in the mines lowered the groundwater pH in the abandoned mine excavations. Rising groundwater levels surfaced through old air shafts and subsidence areas, entered surface water drainages, and spread downstream into associated streams and wetlands. This water generally contains elevated concentrations of dissolved metals which adversely affects aquatic life, including lead, zinc, and cadmium. Deposition of excavated materials ("chat piles") began in the early 1900's. The chat, laced with heavy metals, was scattered throughout the Site, and is suspected as a source of contamination of surface water and groundwater. Ponds and streams throughout the Site are potentially contaminated with mine and chat drainage.

Natural resources potentially affected by contaminants at the Site include, in part, federal and state threatened and endangered species, migratory birds, surface water, ground water, drinking water, plants, fish, biota, wildlife, cultural, agricultural, and terrestrial resources. Natural resources specific to the Tribes include, in part, natural resources used in traditional, cultural, spiritual and/or subsistence practices, such as medicinal herbs, furbearing animals, plants and fish used for ceremonial purposes.

In particular, some of the species that are potentially impacted by releases of hazardous substances include the endangered gray bat, the threatened Neosho madtom, the Ozark cavefish, and the threatened bald eagle. There has also been significant reduction in the number of fish and aquatic invertebrates below the mine discharge points in surface watersheds. The reduction in biomass and diversity of aquatic biota in streams and wetlands, as well as uptake of contaminants at the site, has also potentially affected migratory birds in all three

states.

STATUS OF THE TRI-STATE PARTNERSHIP ACTIVITIES

Natural resources trustees for the three states, the eight Indian tribes, and the federal government have formed a partnership to share resources and information about injuries to natural resources in the Tri-State Mining District. In Oklahoma, the natural resource trustees include the Secretary of Environment for the State of Oklahoma, the U.S. Fish and Wildlife Service and Bureau of Indian Affairs for the U.S. Department of the Interior, and eight separate Indian Tribes (the “Trustees”).

The Tri-State Partnership is in the process of compiling and analyzing available data pertinent to a Tri-State NRDA. Preliminary indications are that there have been extensive injuries to natural resources at the Site. It is possible that damages could exceed several hundred million dollars.

The State of Oklahoma and the U.S. Department of Interior recovered some funds for natural resource damages at the Site in the Eagle Picher Bankruptcy Settlement. The State of Oklahoma received \$345,612 and the U.S. Fish and Wildlife Service received approximately \$400,000. The U.S. Fish and Wildlife Service is proposing to undertake partial restoration for loss of natural resources with the acquisition and management of an Ottawa County endangered bat maternity cave, conservation of high quality bottomland forest along the Neosho River, and acquisition and protection of a large continuous stand of Ozark forest and cave habitats in Adair County, Oklahoma. These proposed restoration projects are scheduled to be implemented in 2000.

AVAILABLE OPTIONS FOR PURSUIT OF A NRD CLAIM

Currently, the Trustees are in the preassessment phase of the NRDA regulations. In the preassessment phase, the Trustees must determine whether there is a reasonable probability that a natural resource damage claim will be successful before funds and resources are expended in carrying out an assessment. Representatives of natural resource Trustees in Oklahoma met on July 19, 2000 to discuss the formation of a trustee council. Oklahoma Trustees could complete the preassessment phase and make a decision on whether to pursue a NRDA as early as the Spring of 2001.

The following will outline options for proceeding with a NRDA at the Tar Creek Superfund Site:

- (5) Initiate Assessment Plan Phase (Winter 2001). If the Trustees determine that an assessment is warranted, a plan for the assessment of natural resource damages must be developed. The Assessment Plan will ensure that the NRDA is conducted in a planned and systematic manner at a reasonable cost. The plan will include a Preliminary Estimate of Damages, an Injury Determination, Quantification of Injuries, and a Damage Determination.
 - (1) **Costs.** The following costs may be incurred in the Assessment Plan phase of the damage assessment:
 - (i) Methodology identification and screening;
 - (1) Potentially responsible party notification;
 - (2) Public participation;
 - (3) Exposure confirmation analysis;
 - (4) Preliminary estimate of damages; and
 - (5) Any other Assessment Plan costs for activities authorized by sections 11.30 through 11.38 of the Type B regulations.
 - (2) **Recovery of Damages.** At the conclusion of the assessment, the Trustees will present the PRPs with a written demand for damages and assessment costs. If the PRPs decline to pay damages and costs, litigation may be initiated pursuant to Section 107 of CERCLA.
 - (3) **Post-Assessment Phase.** Sums recovered by the federal government acting as trustee shall be retained by the trustee, without further appropriation, in a separate account in the U.S. Treasury. Sums recovered by the state shall either: (i) Be placed in a separate account in the state treasury or (ii) Be placed by the responsible party or parties in an interest bearing account payable in trust to the state agency acting as trustee. Sums

recovered by an Indian Tribe shall either (i) Be placed in an account in the tribal treasury or (ii) Be placed by the responsible party or parties in an interest bearing account payable in trust to the Indian Tribe.

- (6) Identification of Potentially Responsible Parties. The Subcommittee has developed a listing of the majority of the information sources available to identify PRPs at the Site. In addition, the Oklahoma Attorney General's Office has created a database that can be used to store all of the available information regarding ownership, leases, company data, production, location, and other pertinent information related to mining, smelting and transportation activities in the Oklahoma portion of the Tri-State Mining District. The database is interfaced with a GIS mapping system that will plot the precise location of the mine on a map that contains numerous data layers.

Although there is an enormous amount of data which remains to be analyzed, it appears that there are viable PRPs at the Site. The Office of the Attorney General will continue to gather and input information into the database after the conclusion of this Subcommittee's work, however, it will be necessary to contract with a professional consultant to complete the work necessary to identify all of the PRPs. The Subcommittee is currently obtaining cost estimates for completing the PRP search.

Because the results of a full PRP search will be beneficial to both a NRDA and a Cost Recovery Action for remediation, the Subcommittee is proposing that the costs be shared between the U.S. Department of Interior, the State of Oklahoma, and the U.S. Environmental Protection Agency. This approach would require a legislative appropriation by the State of Oklahoma.

- (7) NRDA Resource Needs. Whenever possible, the assessment costs may be shared among the Trustees. The Department of Interior has a Natural Resource Damage Assessment and Restoration Fund which can be accessed by the federal government to cost-share with the state

and the other trustees. The U.S. Department of Interior Tri-State NRDA effort has been funded for fiscal year 2000 at approximately \$310,000. Funding needs for 2001 will likely be higher depending on the progress made in 2000.

If the cost of a preassessment screen is shared between the State of Oklahoma and the U.S. Department of Interior, the state's portion may range between \$100,000 and \$200,000.

If the Trustees decide that a NRDA is warranted, the state's portion of the cost share is likely to exceed one million dollars. Given the recovery potential in this case, the Subcommittee recommends that the state pursue funding for the preassessment phase. This will allow the Trustees to make an informed decision on whether to proceed to the assessment phase.

- (4) **Cooperative Assessments and Integration.** The costs of an assessment can be substantially reduced by conducting cooperative assessments with PRPs and by integrating assessment work into the remedial process. These techniques are currently being employed successfully in other states, including the State of Missouri's work in the Tri-State District.

Unlike Missouri, the Oklahoma PRPs are not participating in the remedial action. Encouraging the PRPs to work cooperatively to address remediation and natural resource injuries at the Site will significantly reduce the costs of remediation and restoration activities, as well as potentially eliminate the costs of litigation.

Much of data needed to complete a NRDA at the Site is similar to that which will have to be collected during remedial investigation work and, where additional information is needed, additional data collection can be readily included into remedial sampling efforts. The cost savings inherent to integrating NRDA and remedial efforts is self evident.

It also seems prudent to integrate restoration alternatives into the remedial investigation, feasibility, and design phases at the Tar Creek Site given the complex and diverse nature of the problems that have been identified. For example, there has been extensive discussion regarding

the benefits of artificial wetlands at the site for treatment of hazardous substances, as well as drainage and flooding problems. Creation of artificial wetlands will also be a viable restoration alternative for injuries to natural resources that can supplement the projects designed for remedial purposes. Integration of the NRDA and remedial activities will allow the decision makers to identify all of the alternatives for addressing the problems at the Site and will substantially reduce duplication of efforts.

- (5) **Cooperating Entities**. The Trustee for the State of Oklahoma, the Oklahoma Secretary of Environment, has designated three agencies to represent the interests of the state in the Tri-State Partnership: the Oklahoma Department of Environmental Quality, the Oklahoma Department of Wildlife Conservation, and the Oklahoma Attorney General's Office. The U.S. Fish and Wildlife Service, the Office of the Solicitor, the Bureau of Indian Affairs, the U.S. Geological Survey, and the U.S. Office of Surface Mining all participate in the Tri-State Partnership on behalf of the federal government. There are eight Indian Tribes represented in the partnership, including the Eastern Shawnee Tribe of Oklahoma, the Miami Tribe of Oklahoma, the Modoc Tribe of Oklahoma, the Ottawa Tribe of Oklahoma, the Peoria Tribe of Indians of Oklahoma, the Quapaw Tribe of Oklahoma, the Seneca-Cayuga Tribe of Oklahoma, and the Wyandotte Tribe of Oklahoma. In addition, the State of Kansas is represented by Kansas Department of Wildlife and Parks and the Kansas Department of Health and Environment. The State of Missouri is represented by the Missouri Department of Natural Resources, the Missouri Department of Conservation, and the Missouri Attorney General's Office.

CONCLUSION

Based on preliminary information gathered by this Subcommittee, it appears that the Trustees have sustained injuries to natural resources as a result of a release of hazardous substances at the Tar Creek Superfund Site. It is possible that damages at the Site could exceed several hundred million dollars.

The Subcommittee has also determined that there are viable PRPs at the Tar Creek Superfund Site. Completion of the research undertaken by the Subcommittee on this issue will require the expertise of a professional consulting firm. Because the results of a thorough search for PRPs at the Site will benefit both a cost recovery action and a natural resource damage claim, the Subcommittee proposes that the costs of the search be shared between the State of Oklahoma, the U.S. Environmental Protection Agency, and the U.S. Department of Interior.

The Subcommittee recommends that the Trustees proceed with the preassessment phase of a NRDA. This step will allow the Trustees to formally determine whether there is a reasonable probability of making a successful claim before funds and resources are expended in carrying out the assessment phase. The Subcommittee further recommends that the State of Oklahoma pursue funding to conduct the preassessment phase on a cost-share basis with the U.S. Department of Interior. If the Trustees decide to proceed with an assessment, the Subcommittee recommends that the assessment work and the remedial effort be integrated and that the PRPs be encouraged to work cooperatively with all parties to remediate and restore the Site.